

D3
uncl

beacon signal receive timing varying means for varying the beacon signal receive timing which shifts to its power-on state according to an emanation interval when the emanation interval of said beacon signal is varied according to a transmission data amount [in] received from said base station.

no support in spec

REMARKS

Claims 1-17 are pending in the above-captioned patent application, of which claims 5, 11, and 17 have been amended. No new claims have been added.

The claims have been rejected as follows:

1. Claims 5-7, 11-13 and 17 stand rejected under 35 USC §102(b) as anticipated by U.S. Patent 5,373,506 to Tayloe et al. (hereinafter "Tayloe et al").

2. Claims 1 and 8 stand rejected under 35 USC §103(a) as unpatentable over U.S. Patent 4,449,248 to Leslie et al. (hereinafter "Leslie et al.") or Applicant's admitted Prior Art in view of U.S. Patent 5,276,680 to Messenger (hereinafter "Messenger").

3. Claims 2-3, 9-10 and 14-16 stand rejected under 35 USC §103(a) as unpatentable over U.S. Patent 5,535,207 to Dupont (hereinafter "Dupont").

4. Claims 2-3, 9-10 and 14-16 stand rejected under 35 USC §103(a) as unpatentable over U.S. Patent 5,629,940 to Gaskill (hereinafter "Gaskill").

Applicant respectfully traverses all these rejections.

Tayloe et al. discloses a method and apparatus for paging in a communication system in which a fixed base site 115 periodically pages subscribers 120 in a paging area 100. Paging groups 520 are not sent to subscribers 120 as often when the paging load is small in order to prolong the

battery life of the subscribers. The frequency with which the paging groups 520 are transmitted to subscribers varies with the paging load.

Although the paging frequency may vary dynamically, Figs. 3-7 suggest that a "paging repetition factor" ("DRX") can be changed based on the time of day, paging load and paging load queuing delay to optimize battery power conservation, as disclosed in column 3, line 64 to column 4, line 24.

Although **Taylor et al.** discloses what factors influence the value of DRX, it is silent as to the mechanics of how the value of DRX is dynamically adjusted based on those factors. In any event, there is no suggestion that DRX varies directly with the transmission data amount to be transmitted to the intermittent power-on type mobile station, as shown in Fig. 2C of the instant application.

Accordingly, claims 5, 11 and 17 have been amended to clarify this distinction.

Leslie et al. discloses a battery saving circuit for radio receivers in which a radio receiver circuit is intermittently powered through a controllable power supply switch so that the power is off when no reception is performed. **Leslie et al.** discloses that the control of the power supply for the receiver is controlled by a programmable timing mechanism for removing operating power from the receiver for a time duration which is commanded by electrical control signals received from a central control station.

This is in contrast to the present invention, in which the base station emanates a beacon signal which determines if and when the intermittent power-on type mobile station will be activated (powered-up) to receive data in a data receive-ready period of normally fixed duration. In the present invention the beacon signal activates a "sleeping" power supply to allow data to be received, while in **Leslie et al.** the control signal determines how long the receiver's power supply will "sleep". The Examiner has apparently failed to understand or appreciate this important distinction.

The Examiner has admitted that both **Leslie et al.** and Applicant's admitted prior art fail to recite that a base station preferentially transmits data to the intermittent type mobile station over the

normal type mobile station, as claimed in the present invention, but has cited Messenger for teaching this feature.

Applicant respectfully disagrees.

Column 6, lines 10-24 disclose:

The additional information retrieved from the CAM for a particular LAN device will identify whether the addressed device is battery-powered and requires a power-saving protocol. It will also identify whether the device is mobile and whether packets addressed to the device should receive special treatment to accommodate movement. If the information indicates that no special treatment of the LAN device is required, the cable packet processor 30 simply stores the packet in a conventional first-in, first-out (FIFO) buffer 34. A radio packet processor 36 normally assembles packets from the FIFO buffer 34 into a form appropriate for transmission to LAN devices. It causes these packets to be transmitted by a transceiver 40 and associated antenna 42 in the order in which the packets were originally received.

There is no suggestion in this passage of preferential treatment for one type of mobile station over another. Furthermore, the present invention claims a technique in which it is not necessary to shorten an interval of occurrence of a beacon signal, which is not taught, mentioned or suggested in Messenger.

Summarizing, Applicant submits that Messenger does not disclose a base station preferentially transmitting data for an intermittent-type mobile station over data for a normal type mobile station, as in the present invention.

As noted in Applicant's last response, Dupont discloses a radio communications system in which message delivery to a user terminal includes receiving information representative of an active time slot pattern from the user terminal and determining, dependent on the information, an active time slot pattern for the user terminal, which is then delivered to the user terminal during an active time slot.

This is in contrast to the present invention as claimed, in which a normal receive-ready period for data reception may be extended by transmission of the extension information from the base station at the time of the shift to power-on when a beam signal for the base station is received. Without the time extension information being transmitted, the data is received during its regular receive-ready period in the present invention.

Gaskill discloses a radio communication system in which, upon reception of a "pointer packet", receiver 28 changes into a second data acquisition mode, in which receiver 28 turns on during each subsequent time slot addressed in the pointer packet in the first time slot. Fig. 3 indicates that these subsequent time slots need not be contiguous, which is in contrast to the time period extension which occurs directly after the receive-ready period when necessary, as indicated by the time extension information received from the base station.

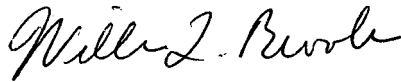
Thus, all 35 USC §103(a) rejections should be withdrawn.

If, for any reason, it is felt that this application is not now in condition for allowance, the Examiner is requested to contact Applicant's undersigned attorney at the telephone number indicated below to arrange for an interview to expedite the disposition of this case.

In the event that this paper is not timely filed, Applicant respectfully petitions for an appropriate extension of time. The fees for such an extension or any other fees which may be due with respect to this paper, may be charged to Deposit Account No. 01-2340.

Respectfully submitted,

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